RESPIRATORY PROTECTION

1. Purpose. To establish procedures that provide protection for all employees required to wear respiratory protection.

2. Reference.

   a. Title 29, CFR, Part 1910.134

   b. EM 385-1-1

3. Background. Exposure limits are established for airborne concentrations of potentially hazardous dusts, fumes, mists and vapors above which employees must not be exposed. Where feasible, engineering controls must be implemented to reduce employee exposure to hazardous substance below these exposure limits. Where engineering controls are not feasible, or while these controls are being instituted, appropriate respirators will be used to protect the health of employees.

4. Policy. Respirators will only be used in lieu of engineering or administrative controls.

   a. When engineering controls, process changes or chemical substitution (capable of reducing exposures to less than 1/2 the Permissible Exposure Limit EL) or Threshold Limit Value (TLV) and 1/10 the Derived Air Concentrations (DAC) are not feasible.

   b. During the interim until other control measures can be implemented.

   c. During emergencies.

5. Responsibilities.

   a. Employees. All employees will be familiar with and comply with written procedures.

      (1) Use all respiratory protective equipment in accordance with direction provided by the supervisor.

      (2) Immediately leave a contaminated area if the respirator malfunctions.

      (3) Notify their supervisor of suspected respiratory hazards and potential problems.

      (4) Take appropriate medical examinations.

   b. Supervisors.

      (I) All supervisors of employees required to wear a respirator will have written procedures covering the use of respirators.

      (2) Ensure only qualified and adequately trained employees are assigned tasks requiring use of respiratory equipment.

      (3) Ensure respirator users are medically evaluated to wear respiratory protection.

      (4) Ensure all respiratory protective equipment is NIOSH and Mine Safety and Health Administration (MSIIA) approved.

      (5) Ensure monitoring of work-site conditions to evaluate worker airborne contaminant exposure.

      (6) Through AHA, review job duties and identify positions which require employees to use respiratory protection.

(7) Provide for fit testing and training.

(8) Enforce the use of respirators where mandatory.

c. District SOHO will.

(1) Provide fit testing.

(2) Recommend types of respiratory protective equipment to be used.

(3) Ensure training and fit-testing programs for personnel issuing or using respiratory protective equipment is adequate.

(4) Provide technical assistance in resolving respiratory protection issues.

(5) Annually evaluate each District element's respiratory protection program for effectiveness.

(6) Provide for and coordinate industrial hygiene investigations and work area surveillance to determine worker exposure levels to toxic substances when requested by area, project, or District elements.

6. Medical Examinations. Employees who use respirators must be physically able to perform the work and use the equipment.

a. The periodic medical examination, to determine medical/physical fitness will include a hands-on examination by the physician, a medical history, a pulmonary function test, and specific medical tests for suspected contaminant exposures.

b. The physician will be informed of the employee's anticipated exposure to hazardous materials.

c. The physician will provide a written opinion based on the employee's current physical condition, past medical history, and anticipated work activities as to the employee's fitness to wear a non-powered air purifying respirator.

7. Training;. Each employee required to wear a respirator will receive training in the proper use and limitations of respiratory protective equipment, and have a record of such training on DD Form 1556 as part of the employee's personnel file. Training will provide the following:

a. Explanation of the hazards of respirator misuse.

b. Discussion of the limitations of engineering controls in negating the necessity of respirator usage.

c. Respirator selection criteria.

d. Donning and doffing the respirator.

e. Usage of the respirator.

f Inspecting and maintaining the respirator.

g. Emergency situations.

h. Proper pressure check (positive and negative) and fit-testing procedures.

i. Qualitative and quantitative fit-test procedures.

8. Equipment.

a. Respiratory protective equipment will be used as issued. No modification or substitution to issued equipment, with the exception of one-for-one cartridge replacement, will be permitted.

b. Only air line hoses specifically approved for use with a given supplied air respirator, will be used to supply air from the breathing-air manifold to air-supplied half-mask, full-face, or hood type respirators. Substitutions or use of fitting adapters are prohibited. These requirements are necessary to maintain NIOSH approval.

c. Respirators issued to an individual employee will be used only by the person to/for whom the respirator was issued.

d. Individual employees will be responsible for cleaning, sanitizing and storage of issued respirators. Cleaning procedures will be ZAW with the manufacturer's recommendations and approved plans. Respirators, when not in use, will be kept sealed in plastic bags, stored away from contaminants, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals. They will be protected from crushing or other damage.

e. All respirators will be inspected prior to issue and all defective parts will be replaced.

f. The respirator face-piece fit will be pressure checked each time a respirator is put on.

g. Cartridges used for HEPA filtration in non-powered air-purifying respirators will be discarded when the employees go through personal decontamination procedures.

h. HEPA cartridges used in association with powered air-purifying respirators will be capped/sealed prior to employees initiating personal decontamination procedures. These cartridges will be stored in sealed plastic bags which are marked with the date(s) of usage and the site/location where use occurred. Reuse of these cartridges will require testing each cartridge with a flow meter.

9. Repair of Respirators.

a. Respirator assembly and repair will be done only by personnel who have been trained and qualified. Respirators will be returned to the manufacturer for repairs as necessary.

b. Respirator air line hoses will be visually inspected for defects such as cuts, damaged fittings, or excessive wear prior to each use. Defective units will be repaired or discarded.

10. Respirator Selection.

a. Respirators will be selected and used based on the hazards to which the worker is exposed, the work environment, and the characteristics/limitations of the respirator.

b. All respiratory protective systems used will have NIOSI-I and MSHA approval.

c. Air-supplied respirators are required for contaminant levels which exceed those for which filtering or purifying types are approved.

d. For questions concerning PEL, work site conditions and respirator requirements, contact the District SOHO.